

Using Web Ex to Conduct Usability Testing of an On-Line Survey Instrument

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Today's Talk

- Usability Testing
- State R&D Survey
- Web Ex
- Positives / Negatives
- Conclusions

Usability Testing

- Generally done in person
- Users perform tasks (go through survey)
- Goals:
 - Identify any usability problems
 - Collect quantitative data on users' performance
 - Determine user's satisfaction with the product
 - Identify changes to improve user performance
- Test early and often (generally 3-5 users per round)

State R&D Survey

- Voluntary survey of R&D expenditures for state government sector of US
- Sponsored by National Science Foundation (NSF), conducted by Census Bureau
- Conducted every other year

State R&D Survey (cont)

- State agencies with R&D complete short web instrument
- Each state selects a state coordinator, who completes short web survey and tracks progress of state agencies
- For 2012, asked for two years of data instead of one

Usability Testing for State R&D Survey

- Generally have visited 4-5 states in past years
- This year, usability testing focused on usability of revisions to web instrument AND additional reporting burden
- Usability testing included both state coordinators AND agency respondents (often together)

Usability Testing for State R&D Survey (cont)

- Tight timeframe for usability testing
- Respondents throughout US, difficult to get to many of the locations (state capitals)
- Decided to consider remote testing for some of the interviews

Remote Usability Testing

- Usually performed using video conferencing
- Considered several on-line web conferencing alternatives
 - Web Ex
 - GoToMeeting
 - Fuze Meeting
 - Skype
 - Team Viewer

Web Ex

- Selected Web Ex for ease of use and availability
- NSF had software, and provided training and support (though they use it for holding panel meetings and evaluating proposals)

Preparing for Usability Tests with Web Ex

- A lot of upfront work
- Took NSF training class (not particularly relevant for our purposes)
- Played with software
- Did multiple dry runs with other team members, various computers, browsers, etc.
- Drafted a protocol with step-by-step instructions for us to follow

Conducting Usability Tests with Web Ex

- Once respondents agreed, we sent a confirmation email, then they received a Web Ex email
- On day, respondents logged in to Web Ex (had to download software), then called into conference call (two-step process)
- Introductions, verbal consent, Web Ex review
- Reviewed cover letter
- Had respondents go through web instrument, entering data, triggering edits, etc.
- Discussed concerns, recommendations, etc.

Web Ex

- Show video (if possible).

Issues with Web Ex

- Wanted to review draft cover letter with respondents
- Tried to use “Share file” but had a lag time issue
 - Respondent would scroll down but we wouldn’t see the movement for several seconds, also jerky
 - Ended up emailing them the letter to bring up on their screen

Issues with Web Ex (cont)

- Finally used “Share desktop”
 - We were worried respondents might have security concerns
 - Didn’t end up being relevant for us, since these were government agencies and didn’t have sensitive data
 - If an issue, could ask them to close everything on desktop first

Issues with Web Ex (cont)

- Less user-friendly than anticipated
 - For example, when moderator would turn over the meeting to respondent (“Share desktop”), he couldn’t take the meeting control back (had to ask respondent to transfer it back)

Issues with Web Ex (cont)

- Delays
 - Seemed to be related to bandwidth or connection speed at respondent's end
 - Hadn't happened in dry runs

Issues with Web Ex (cont)

- Some respondents had trouble getting in
 - One had used Web Ex before
 - One eventually ended up walking across the hall to his colleague's office!

Issues with Web Ex (cont)

- Browser issues
 - We tested in multiple browsers
 - But one respondent was unable to get it to work in Firefox
 - He got a message that the java download was corrupt

Issues with Web Ex (cont)

- Automated, system-generated invitation email
- Long and confusing
- Perhaps send own simplified version of this email?

WebEx Automated Email

Hello ,

CHRISTOPHER PECE invites you to attend this online meeting.

Topic: Test 3

Date: Wednesday, May 9, 2012

Time: 11:00 am, Eastern Daylight Time (New York, GMT-04:00)

Meeting Number: 742 183 235

Meeting Password: Usch\$052012

To join the online meeting (Now from mobile devices!)

-
1. Go to <https://mmancusa.webex.com/mmancusa/j.php?ED=182386752&UID=1274895012&PW=NZDQ3YjU5OTUy&RT=MiMxMQ%3D%3D>
 2. If requested, enter your name and email address.
 3. If a password is required, enter the meeting password: Usch\$052012
 4. Click "Join".

To view in other time zones or languages, please click the link:

<https://mmancusa.webex.com/mmancusa/j.php?ED=182386752&UID=1274895012&PW=NZDQ3YjU5OTUy&ORT=MiMxMQ%3D%3D>

To join the teleconference only

Provide your phone number when you join the meeting to receive a call back. Alternatively, you can call:

Call-in toll-free number (Verizon): 1-866-658-3448 (US)

Call-in number (Verizon): 1-8666583448 (US)

Show global numbers: <https://wbbc.verizonbusiness.com/wbbcClick2Join/servlet/WBCClick2Join?TollNumCC=1&TollNum=8666583448&TollFreeNumCC=1&TollFreeNum=866-658-3448&ParticipantCode=3406344&customHeader=mymeetings&dialInNumbers=true>

Attendee access code: 340 634 4

For assistance

-
1. Go to <https://mmancusa.webex.com/mmancusa/mc>
 2. On the left navigation bar, click "Support".

You can contact me at:

cpece@nsf.gov

1-7032927788

To add this meeting to your calendar program (for example Microsoft Outlook), click this link:

<https://mmancusa.webex.com/mmancusa/j.php?ED=182386752&UID=1274895012&ICS=MI&LD=1&RD=2&ST=1&SHA2=DKialnpg8cV89VrvvXjN8hIK2hNjmNgk2Vq-k0yxWg=&RT=MiMxMQ%3D%3D>

The playback of UCF (Universal Communications Format) rich media files requires appropriate players. To view this type of rich media files in the meeting, please check whether you have the players installed on your computer by going to <https://mmancusa.webex.com/mmancusa/systemdiagnosis.php>

<http://www.webex.com>

CCP:+18666583448x3406344#

IMPORTANT NOTICE: This WebEx service includes a feature that allows audio and any documents and other materials exchanged or viewed during the session to be recorded. By joining this session, you automatically consent to such recordings. If you do not consent to the recording, discuss your concerns with the meeting host prior to the start of the recording or do not join the session. Please note that any such recordings may be subject to discovery in the event of litigation.

Issues with Web Ex (cont)

- Some of these issues might be resolved by now, in newer versions of Web Ex

Positives

- Web Ex did work
- Saved on travel time and costs and were able to meet with states we hadn't been able to before
- Easier to schedule (and reschedule)
- Have video, as well as audio, recordings
 - Usually only have audio for in-person visits, due to security concerns
- Easy to share recordings

Negatives

- Missed facial expressions and body language
- With in-person interviews, you can see respondents access their records (important in establishment surveys)
- Process not intuitive
- Required lots of practice
- Still had unexpected issues

Conclusions

- Would recommend using Web Ex for some, but not all, usability interviews
 - Wouldn't want to rely only on remote testing
 - Use as a supplement to in-person testing
- Web Ex should do some usability testing of Web Ex!

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